BSH 5/25/07

AMENDMENTS TO THE SPECIFICATION

Please amend the paragraph beginning on page 1, line 11 as follows:

Life activities of organisms require proteins having various physiological activities. Many of these physiologically active proteins have a disulfide bond in their molecules. Also, they exist as oligomers such as dimers composed of homogenous or heterogeneous peptide chains and are biosynthesized in a state that a disulfide bond is formed between the peptide chains. While existence as a dimer is essential for many physiologically active proteins existing as a dimer to express their biological activity, proteins that are not necessarily ~~be~~ required to ~~be~~ exist as a dimer are also known.

AMENDMENTS TO THE SPECIFICATION

BSH 5/25/07 Please insert the following paragraph on page 1, between lines 2 and 3:

CROSS-REFERENCE TO RELATED APPLICATIONS

The present application is a National Stage (371) of PCT/JP00/02127, filed on March 31, 2000, which claims priority to JP 11/96073, filed on April 2, 1999.

BSH 5/25/07 Please amend the paragraph beginning on page 9, line 20 as follows:

Fig. 3 shows results of analysis by reverse phase HPLC, of refolded AS1051-WT (Fig. 3a) and AS1051-Ala (Fig. 3b) samples before dialysis (a) and after dialysis (b). Time is represented on the horizontal axis and absorbance (216 nm), i.e., the amount of dissolved proteins is represented on the vertical axis.

Please amend the paragraph beginning on page 10, line 3 as follows:

~~Fig. 6~~ Fig. 6a is a reverse phase liquid chromatogram of the AS1051 protein in which the cysteine residue at position 81 was replaced with an alanine residue (AS1051-Ala) after digestion with lysyl endopeptidase. Fig. 6b is a reverse phase liquid chromatogram of the polyethylene-glycolated AS1051 (AS1051-PEG) after digestion with lysyl endopeptidase. The polypeptide fragments in Fig. 6 can be found in the Sequence Listing as follows: sequence 1 = residues 41-43 of SEQ ID NO: 5; sequence 2 = residues 145-149 of SEQ ID NO: 5; sequence 3 = residues 24-40 of SEQ ID NO: 5; sequence 4 (top) = residues 85-100 of SEQ ID NO: 5 and sequence 4 (bottom) = residues 44-60 of SEQ ID NO: 5; sequence 5 (top) = residues 133-144 of SEQ ID NO: 5 and sequence 5 (bottom) = residues 101-132 of SEQ ID NO: 5; sequence 6 = residues 61-84 of SEQ ID NO: 5.

214595US-0PCT

IN THE UNITED STATES PATENT & TRADEMARK OFFICE

IN RE APPLICATION OF: :

NAOYUKI FUKUCHI ET AL : ATTN: APPLICATION DIVISION

SERIAL NO: NEW APPLICATION :
(Based on PCT/JP00/02127)

FILED: HEREWITH : EXAMINER:

FOR: METHOD FOR PRODUCING :
SUBUNIT PEPTIDE ORIGINATING
FROM OLIGOMERIC PROTEIN

Pre Amendt AJ Pt 1 4-12-02

PRELIMINARY AMENDMENT

ASSISTANT COMMISSIONER FOR PATENTS
WASHINGTON, D.C. 20231

SIR:

Prior to examination on the merits, please amend the above-identified application as follows.

IN THE SPECIFICATION

BSH 5/25/07

Page 8, beginning at line ~~22~~ 21, please delete the paragraph and replace it with the following paragraph:

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(11) A subunit peptide originating from an oligomeric protein having disulfide bonds within a subunit and between subunits, wherein

A1

polyoxyalkyl polyether is bonded to a cysteine residue that is originally involved in formation of a disulfide bond between subunits of the oligomeric protein, among cysteine residues in the subunit peptide, and the subunit peptide has decreased antigenicity.
